

IN THE CLAIMS

1. (Currently Amended) A modified gp120 polypeptide comprising portions of at least two conserved regions of an envelope protein selected from a primate lentivirus, wherein at least two of the four glycosylation sites proximal to the CD4 binding site or chemokine CCR5 or CXCR4 chemokine receptor binding site have been altered, wherein the alteration prevents glycosylation at said sites, and wherein the modified polypeptide maintains the overall 3-dimensional structure of a discontinuous conserved epitope of the wild-type gp120.
2. (Original) The modified gp120 polypeptide of claim 1, wherein the discontinuous conserved epitope is a CD4bs epitope or a CD4i epitope.
3. (Original) The modified gp120 polypeptide of claim 2, wherein the gp120 protein is selected from the group consisting of HIV-1 , HIV-2 and SW.
*A2
cont'd*
4. (Currently Amended) The modified gp120 polypeptide of claim 3, wherein the gp120 protein is HIV- 1 and the glycosylation sites are selected from the group of amino acids that correspond to positions 197, 276, 301 and 386 of HIV-1 strain HXBc2.
5. (Canceled)

6. (Currently Amended) The modified gp120 polypeptide of claim 2 4, wherein the gp120 polypeptide further contains at least one of the following changes relative to the wild-type to gp120 protein:

- (a) introduction of disulfide bonds;
- (b) filling a cavity of the gp120 protein with hydrophobic amino acid residues;
- (c) introducing a Pro residue at a defined turn structure; or
- (d) increasing the hydrophobicity across the interface between the gp120 domains.

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

A2

14. (Currently Amended) The modified gp120 polypeptide of claim 1, 4,~~5~~ or 6,
wherein the polypeptide further contains at least one pan-reactive T-cell helper epitopes.

A3

15. (New) The modified gp120 polypeptide of claims 4 or 6, wherein one of the
glycosylation sites that have been altered corresponds to position 301 of HIV-1 strain HXBc2.

16. (New) The modified gp120 polypeptide of claims 4 or 6, wherein all four of the
glycosylation sites have been altered.